

TWO NEW AUSTRALIAN SPECIES OF *POLLENIA*.

By G. H. HARDY,

Walter and Eliza Hall Fellow in Economic Biology,
Queensland University, Brisbane.

(Two Text-figures.)

[Read 28th September, 1932.]

The presence of crinkly yellow hairs on the thorax is associated with all the species of *Pollenia* seen by me in Australia. Sometimes these hairs are plentifully represented, sometimes not easy to detect. I have not seen genus *Dexopollenia* Bezzi, which also has this character and is apparently allied. The genus *Acanthomyza* Malloch may be allied too, as it was described from Australia on a unique specimen in bad condition. It is not possible at present to give characters that will reliably distinguish these genera, but none of the forms known to me can be placed other than in genus *Pollenia*, as they apparently are not closely allied to Malloch's or Bezzi's forms referred to. *Pollenia hirtipes* Malloch differs from the following species on the characters to be deduced from the illustration given by that author and on the chaetotaxy. Elsewhere in the literature, I can find no description that may apply to the new forms below.

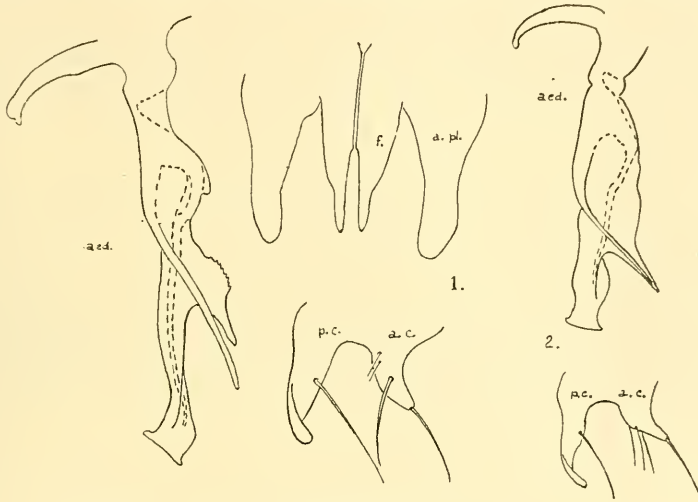
Some of the species of *Pollenia* and allies appear to be very local in distribution and need to be searched for in a suitable locality, and in my endeavour to discover the breeding localities of *Calliphoras*, I have accidentally discovered breeding localities of these species of *Pollenia*. Stray specimens are being taken by various collectors, and occasionally one of these becomes described without reference to the Australian species as a whole, making subsequent recognition very difficult. There is danger, therefore, of the genus drifting into a confused state, such as has already happened with *Calliphora* and other genera well represented in Australia. As I have had need to study the genitalia of two species of *Pollenia*, I am anticipating any possible confusion in the future by publishing the figures and am giving field data sufficient to lead to the discovery of more specimens.

POLLENIA FLINDERSI, n. sp. Text-fig. 1.

On the male the eyes are separated by about the width of the ocellar triangle. The frons is yellowish when seen from above, and black when viewed from below. This same bicoloured nature is to be found on nearly the whole of the head. The bristles are black and the hairs yellow. The antennae are reddish, stained apically with black. The female has a similarly coloured head with eyes situated wide apart. At the summit the frons is wider than three times the width of the ocellar tubercle, and the eyes diverge conspicuously from there, as is the case with the typical species of the genus.

The thorax dorsally is plentifully supplied with yellow hairs amongst the bristles which are situated as follows: 2 presutural, 2 postsutural acrostichals;

2 presutural, 3 postsutural dorsocentrals, but a third presutural may be placed anteriorly to these; 3 humeral; 1 posthumeral; 1 presutural; 2 notopleural; 2 intraalar; 3 supraalar; 2 postalar; on female 3, on male 4 marginal, and 1 discal scutellar; all these being situated each side of the median line. The pleural hairs are yellow like those on the dorsum, but in places these tend to become crinkly, especially near the wings. There are two sternopleural bristles, the usual row of mesopleural and hypopleural bristles, and two pteropleurals.



Text-figs. 1-2.

1.—*Pollenia flindersi*, n. sp.; aed., aedeagus; a.c., anterior clasper; p.c., posterior clasper; f., forceps; a.pl., accessory plate.

2.—*Pollenia calamisessa*, n. sp. Aedeagus and claspers.

The abdomen is black, not shining, as it is covered with a yellow tessellation. The hairs above are black, those below are yellow. The bristles along the margin of the segments are stronger on the male than on the female, and on the former some bristle-like hairs are developed, scattered over some of the tergites. The aedeagus is very long and slender, but of the normal *Pollenia* formation. The claspers are simple, normally with four long bristles on the anterior clasper, but this is liable to variation, one such case being illustrated in the figure. The forceps are small and simple, and the accessory plates rather broad. The legs are black and without marked features. The wings are hyaline, with normal venation.

Hab.—Victoria: Flinders, 4 males, 1 female; January, 1931. All these were taken at flowering shrubs in a rough patch of vegetation near the golf course, late in the afternoon.

Notes.—This species is very much lighter in tone than the other Australian forms before me. In this and many other features it corresponds to *Pollenia rudis* Fab., the type of the genus, but differs slightly in the bristles of the thorax, and the eyes of the male are much wider apart. The specific name is based on that of the navigator after whom the type locality is called.

POLLENIA CALAMISESSA, n. sp. Text-fig. 2.

On the male the eyes are approximate for a considerable distance; those of the female are wide apart, the frons being normal in width. The head is black with a grey pulverulent covering seen from above. Most of the hairs on the male are black, on the female yellow, and in other respects the characters conform to those of *P. flindersi*, with the antennae of the male mainly black.

The thorax dorsally is shining black, with black hairs and bristles. The latter correspond to those of *P. flindersi*, except there are three postsutural acrostichals and only three marginal bristles on the scutellum of both sexes. There is a strong trace of grey pulverulent covering over the dorsum, and this is weakly continued over the black shining abdomen. The pleura has traces of yellow hair in places, some of these being crinkly, but on the abdomen and the legs all hairs are black.

The aedeagus is short and stouter than that of *P. flindersi*, the apical part beyond the slender strut being conspicuously so, but the claspers and forceps compare with those on that species and the accessory plates are much narrower, being only half the width.

Hab.—Queensland: Brisbane, 10 males, 2 females, December, 1929. All these were taken resting on reeds along a watercourse near a permanent waterhole. 15 miles from Brisbane, along the Southport Road. In this same spot, and with the same habit, another species of *Pollenia* was taken in October, 1927.
